

CLAIMS

1. A method for correcting colors in digital image space, comprising:
obtaining an image containing a specified target test sheet;
5 creating an image file containing said image;
providing a profiling mechanism where said profiling mechanism
optionally checking an image file for correct alignment with a target test sheet
with information within said image file;

10 said profiling mechanism matching colors of said image file with colors
of said target test sheet using a transformation image algorithm; and
creating a color corrected image profile for said submitted image file.

2. A method as in Claim 1, wherein said method further comprises
transmitting said image profile.

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3. A method as in Claim 1, wherein said method further comprises using
said image profile to correct color in another image file.

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4. A method as in Claim 1, wherein said method further comprises using
said image profile to correct contrast in another image file.

25 5. A method as in Claim 1, wherein said registering for said profiling
software further comprises obtaining a target test sheet and instructions for
use.

6. A method as in Claim 1, wherein said uploading an image file for submitting to said profiling mechanism further comprises photographing said target test sheet in specific lighting conditions.

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7. A method as in Claim 1, wherein said uploading an image file for submitting to said profiling mechanism further comprises photographing an object under suitable lighting conditions.

10 8. A method as in Claim 1, wherein said profiling mechanism checking said image file for correct alignment further comprises checking for correct orientation with said target test sheet.

15 9. A method as in Claim 1, wherein said profiling mechanism checking said image file for correct alignment further comprises checking for correct intensity.

20 10. A method as in Claim 1, wherein said profiling mechanism checking said image file for correct alignment further comprises checking for correct hue.

25 11. A method as in Claim 1, wherein said transformation image algorithm matches colors of said image file with colors of said target test sheet using binary color coding such that each color is represented by a unique binary number.

12. A method as in Claim 1, wherein creating a color corrected image profile for said submitted image file further comprises manipulating said color corrected image profile.

5 13. A method as in Claim 1, wherein creating a color corrected image profile further comprises transmitting said color corrected image profile.

14. A method as in Claim 1, wherein creating a color corrected image profile further comprises printing said color corrected image profile.

10 15. A method as in Claim 1, wherein creating a color corrected image profile further comprises linking said color corrected image profile to a digital exhibit space.

15 16. A method as in Claim 1, wherein creating a color corrected image profile further comprises comparing said color corrected image profile to said image file obtained from photographing an object under suitable lighting conditions.

20 17. A method as in Claim 1, wherein creating a color corrected image profile further comprises saving said color corrected image profile for future viewing.

25 18. A method as in Claim 7, wherein said uploading an image file for submitting to said profiling software further comprises uploading said image file to a web site.

19. A method as in Claim 13, wherein creating a color corrected image profile further comprises transmitting said color corrected image profile via e-mail.

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20. A method as in Claim 14, wherein creating a color corrected image profile further comprises printing said color corrected image profile on a local printer.

10 21. A method as in Claim 14, wherein creating a color corrected image profile further comprises printing said color corrected image profile at a specified remote location.

15 22. A method as in Claim 14, wherein creating a color corrected image profile further comprises printing said color corrected image profile comprises applying a printer's device dependent color space for color correction.

23. A method as in Claim 15, wherein creating a color corrected image profile further comprises linking said digital exhibit space to said web site.

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24. A method as in Claim 15, wherein creating a color corrected image profile further comprises accessing said digital exhibit space linked to said web site.

25. A method as in Claim 15, wherein creating a color corrected image profile further comprises accessing said digital exhibit space using access codes.

5 26. A method as in Claim 15, wherein creating a color corrected image profile further comprises accessing said digital exhibit space using a password.

27. An apparatus for automatically correcting colors in a digital image
10 space, comprising:

a processor;

a profiling mechanism that operates under control of said processor;

a target test sheet;

15 an image acquisition device for generating an image file for submission to said profiling mechanism;

wherein said profiling mechanism optionally checks said image file for correct alignment

with said target test sheet;

said profiling mechanism comprising a transformation image algorithm

20 for matching colors of said image file with colors of said target test sheet and for

creating a color corrected image profile for said submitted image file.

28. An apparatus as in Claim 27, wherein said target test sheet is digitized
25 by acquiring said target test sheet with said image acquisition device under specific lighting conditions.

29. An apparatus as in Claim 27, wherein said image acquisition device comprises a scanner.

5 30. An apparatus as in Claim 27, wherein said image acquisition device comprises a digital camera.

31. An apparatus as in Claim 30, wherein said profiling mechanism is integrated into said camera.